

**IN THE CLAIMS**

Please amend the claims as follows. Any additional differences in the claims below and the current state of the claims are unintentional and in the nature of a typographical error.

1. (Currently Amended) A method, comprising:  
receiving a sample of a signal being filtered;  
identifying a bias associated with the sample, the bias identifying a difference between an actual value of the sample and an expected value of the sample, the bias comprising a cushion and an increment;  
identifying a portion of the bias based at least partially on a size of the cushion; and  
outputting ~~[[an]] the expected value for a prior of the sample of the signal being filtered~~ combined with ~~[[a]] the portion of the bias , the portion of the bias based at least partially on a size of the cushion.~~

2. (Currently Amended) The method of Claim 1, wherein:  
the cushion in the bias is based at least partially on ~~[[the]]~~ an actual value of a prior sample of the signal and [[the]] an expected value for the prior sample; and  
the increment in the bias is based at least partially on a difference between (1) an actual change between the sample and the prior sample ~~[[s]]~~ and (2) an expected change between the sample and the prior sample ~~[[s]]~~.

3. (Currently Amended) The method of Claim 1, wherein outputting the expected value of the ~~prior~~ sample combined with the portion of the bias comprises:

identifying a weight associated with the bias; and

dividing the bias by the weight to identify the portion of the bias to be combined with the expected value of the ~~prior~~ sample.

4. (Original) The method of Claim 3, wherein identifying the weight comprises:  
identifying a larger weight when the increment is relatively large compared to the cushion; and

identifying a smaller weight when the cushion is relatively large compared to the increment.

5. (Original) The method of Claim 4, wherein:  
the weight is larger when the signal being filtered has an inconsistent signal direction;  
and  
the weight is smaller when the signal being filtered has a consistent signal direction.

6. (Original) The method of Claim 3, wherein:

identifying the weight comprises identifying the weight using one of elliptical weighting and diamond weighting;

the elliptical weighting and the diamond weighting are associated with a first maximum value along an axis representing the increment and a second maximum value along an axis representing the cushion, the first maximum value larger than the second maximum value.

7. (Original) The method of Claim 6, wherein:

the first maximum value lies between three and ten; and

the second maximum value lies between 0.75 and one.

8. (Currently Amended) The method of Claim 1, further comprising identifying a bias associated with ~~[[the]]~~ a prior sample, the bias associated with the prior sample comprising a cushion of zero and an increment representing the entire bias associated with the prior sample.

9. (Currently Amended) The method of Claim 1, wherein identifying the expected value for the ~~prior~~ sample comprises identifying the expected value using a model.

10. (Currently Amended) An apparatus, comprising:

an input operable to receive a signal; and

a filter operable to filter the signal by:

identifying a bias associated with a sample of the signal, the bias identifying a difference between an actual value of the sample and an expected value of the sample, the bias comprising a cushion and an increment;

identifying a portion of the bias based at least partially on a size of the cushion;  
and

outputting ~~[[an]]~~ the expected value ~~for a prior of the~~ sample ~~of the signal~~  
combined with ~~[[a]]~~ the portion of the bias ~~, the portion of the bias based at least partially on a size of the cushion.~~

11. (Currently Amended) The apparatus of Claim 10, wherein:

the cushion in the bias is based at least partially on ~~[[the]]~~ an actual value of a prior sample of the signal and ~~[[the]]~~ an expected value for the prior sample; and

the increment in the bias is based at least partially on a difference between (1) an actual change between the sample and the prior sample ~~[[s]]~~ and (2) an expected change between the sample and the prior sample ~~[[s]]~~.

12. (Currently Amended) The apparatus of Claim 10, wherein the filter is operable to output the expected value of the ~~prior~~ sample combined with the portion of the bias by:

identifying a weight associated with the bias; and

dividing the bias by the weight to identify the portion of the bias to be combined with the expected value of the ~~prior~~ sample.

13. (Original) The apparatus of Claim 12, wherein:  
the weight is larger when the signal being filtered has an inconsistent signal direction;  
and  
the weight is smaller when the signal being filtered has a consistent signal direction.

14. (Original) The apparatus of Claim 12, wherein:  
the filter is operable to identify the weight using one of elliptical weighting and diamond weighting;

the elliptical weighting and the diamond weighting are associated with a first maximum value along an axis representing the increment and a second maximum value along an axis representing the cushion;

the first maximum value lies between three and ten; and

the second maximum value lies between 0.75 and one.

15. (Currently Amended) The apparatus of Claim 10, wherein the filter is further operable to identify a bias associated with ~~[[the]]~~ a prior sample, the bias associated with the prior sample comprising a cushion of zero and an increment representing the entire bias associated with the prior sample.

16. (Original) The apparatus of Claim 10, wherein the filter comprises a processor.

17. (Currently Amended) A computer program embodied on a computer readable medium ~~and operable to be executed by a processor~~, the computer program comprising computer readable program code for:

receiving a sample of a signal being filtered;

identifying a bias associated with the sample, the bias identifying a difference between an actual value of the sample and an expected value of the sample, the bias comprising a cushion and an increment;

identifying a portion of the bias based at least partially on a size of the cushion; and

outputting ~~[[an]]~~ the expected value ~~for a prior of the sample of the signal being filtered~~ combined with ~~[[a]]~~ the portion of the bias ~~, the portion of the bias based at least partially on a size of the cushion.~~

18. (Currently Amended) The computer program of Claim 17, wherein:

the cushion in the bias is based at least partially on [[the]] an actual value of a prior sample of the signal and [[the]] an expected value for the prior sample; and

the increment in the bias is based at least partially on a difference between (1) an actual change between the sample and the prior sample [[s]] and (2) an expected change between the sample and the prior sample [[s]].

19. (Currently Amended) The computer program of Claim 17, wherein the computer readable program code for outputting the expected value of the ~~prior~~ sample combined with the portion of the bias comprises computer readable program code for:

identifying a weight associated with the bias; and

dividing the bias by the weight to identify the portion of the bias to be combined with the expected value of the ~~prior~~ sample.

20. (Original) The computer program of Claim 19, wherein:

the weight is larger when the signal being filtered has an inconsistent signal direction;  
and

the weight is smaller when the signal being filtered has a consistent signal direction.

21. (Original) The computer program of Claim 19, wherein:

the computer readable program code for identifying the weight comprises computer readable program code for identifying the weight using one of elliptical weighting and diamond weighting;

the elliptical weighting and the diamond weighting are associated with a first maximum value along an axis representing the increment and a second maximum value along an axis representing the cushion;

the first maximum value lies between three and ten; and

the second maximum value lies between 0.75 and one.

22. (Currently Amended) The computer program of Claim 17, further comprising computer readable program code for identifying a bias associated with ~~[[the]]~~ a prior sample, the bias associated with the prior sample comprising a cushion of zero and an increment representing the entire bias associated with the prior sample.